



Jefferson Lab Alignment Group

Data Transmittal

TO: D. Kashy

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FROM: J. Dahlberg

Checked:

: B1027

DETAILS:

Below are the results from the INFN cerenkov inspection performed in the test lab. For ease of analysis, a right handed coordinate system was centered on the two top aluminum I-beams (corner points below in bold), along the sides of the detector. All points are labeled on the detector. The origin is the midpoint between I-beam corner points 1 and 5. A +Z is towards corner points 4 and 8, and a +Y is up. In addition to locating the geometric features, the results from the gas pressurization measurements are also listed below. The first set of data to tie in the tooling balls and geometric features is at 0.7" pressure.

LOC.	Z	X	Y	LOC.	Z	X	Y
TP1	1648.51	929.16	-70.64	IBEAM3	2336.44	585.43	-239.47
TP2	912.72	1193.88	-55.55	IBEAM4	2236.45	617.94	-1.82
TP3	1324.85	859.42	-495.23	IBEAM5	-1.75	-1510.04	-0.75
TP4	1705.59	-909.19	-65.61	IBEAM6	267.04	-1065.21	-818.93
TP5	918.92	-1184.19	-66.12	IBEAM7	2332.74	-587.85	-234.84
TP6	1336.12	-856.92	-487.54	IBEAM8	2232.76	-617.94	1.82
TB1	2214.42	665.00	-33.69	SP2-1	-199.27	1163.46	-268.14
TB2	2215.61	-662.20	-29.57	SP2-2	-188.84	1163.33	-108.66
TB3	-223.41	1090.53	-647.83	SP2-3	-189.34	723.28	-108.94
TB4	-189.62	1288.63	-96.17	SP2-4	-199.66	723.43	-268.52
TB5	-193.39	4.02	-136.26	SP1-1	-201.29	-722.81	-268.67
TB6	-225.34	11.60	-636.88	SP1-2	-190.95	-723.09	-109.41
TB7	-227.34	-1067.49	-656.94	SP1-3	-191.85	-1162.88	-109.72
TB8	-192.03	-1274.95	-99.57	SP1-4	-202.33	-1162.64	-269.49
IBEAM1	1.75	1510.04	0.75	HOLE1	2477.37	-46.53	14.11
IBEAM2	269.92	1065.96	-818.63	HOLE2	2477.67	43.46	13.82

LOC.	0.7" PRESSURE			0" PRESSURE(Δ from 0.7)			2" PRESSURE(Δ from 0.7)		
	Z	X	Y	Δ Z	Δ X	Δ Y	Δ Z	Δ X	Δ Y
TP4	1705.60	-909.12	-65.50	0.06	-0.24	-0.03	-0.08	0.15	-0.07
TP5	918.98	-1184.17	-66.06	0.06	-0.30	0.00	-0.08	0.23	-0.03
TP6	1335.99	-856.92	-487.48	0.15	-0.41	0.03	-0.05	0.40	-0.01
TB2	2215.60	-662.17	-29.38	0.08	-0.11	-0.05	-0.03	0.11	-0.07
TB3	-223.40	1090.45	-647.83	-0.03	-0.01	0.18	0.01	0.09	-0.18
TB4	-189.59	1288.65	-96.16	0.02	-0.05	0.17	-0.04	0.03	-0.18
TB5	-193.46	4.06	-136.25	1.00	-0.04	0.02	-1.14	-0.02	-0.03
TB6	-225.40	11.50	-636.84	0.63	-0.01	0.16	-0.72	0.04	-0.26
TB8	-192.06	-1274.95	-99.54	0.15	-0.01	0.14	-0.04	-0.02	-0.22
SKIN1	916.20	-944.80	313.62	2.74	-5.20	-9.90	-0.97	3.15	5.77
SKIN2	905.30	-436.81	405.86	0.42	-0.67	-51.34	-2.26	-0.18	25.31
SKIN3	902.68	6.17	439.37	0.58	-0.18	-73.36	-4.34	0.15	33.05
SKIN4	1364.52	12.98	443.40	1.46	-0.07	-63.07	11.02	-24.86	28.29
SKIN5	1381.52	-384.82	419.07	2.35	-0.30	-54.17	0.95	-1.21	21.58
SKIN6	1389.39	-735.34	358.01	3.20	-2.11	-18.32	-2.88	3.40	5.16
RIB1	1966.91	-606.85	391.17	10.76	3.96	3.84	9.50	6.65	2.55
RIB2	1167.36	-997.85	239.77	3.48	-4.67	3.00	10.40	10.60	-0.89
RIB3	418.02	-1304.53	259.86	-10.66	-7.14	1.22	-13.83	-2.69	-0.78